

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-11. (Cancelled)

12. (New) A method for handover in a communication system, wherein said communication system includes an access network having Radio Network Controllers (RNC), Radio Base Stations (RBS) consisting of main units (MU) which perform base band signal processing, and one or more radio remote units (RRUs) which convert between baseband and radio frequencies and transmits and receives signals over one or more antennas covering cells, and one or several User equipment (UE) moving closer and closer to another cell, which said network is made aware of and then it will initiate a handover process, during which the call will be transferred from one cell to another cell within said radio base station (RBS) or to a cell in another Radio base station (RBS) in said communication network, wherein said handover process interact with a memory containing a list (softer handover group) of said radio remote units (RRUs) capable of doing softer handover with each other using the same Rake receiver.

13. (New) The method according to claim 12, wherein said handover process is performed according to a selection from said list and said handover is performed according to the rules:

If the new cell is within the said list (Softer handover group) as another cell used by the user equipment (UE or phone), a Softer HO is initiated to the RBS as normal.

If the new cell is not within the said list (softer handover group) as another cell used by the user equipment (UE or phone), a Soft handover is initiated in the RNC or RBS.

14. (New) The method according to claim 12, wherein said soft handover in the Radio base station (RBS) is a second stage maximum ratio combining or a selection combining with separate Rake receivers.

15. (New) The method according to claim 13, wherein said selection among the two situations can be done with support from Radio Network controller or locally in said Radio base station (RBS).

16. (New) The method according to claim 12, wherein said list (softer handover group) are made from a user equipment (UE) measured delay.

17. (New) The method according to claim 16, wherein a reception time difference are used by Radio network controller (RNC) or Radio base station to calculate the relative propagation delay between the new antenna and the user equipment compared to the other active cells.

18. (New) The method according to claim 16, wherein said Radio network controller (RNC) can based on this measurement include the new cell in said list (Softer handover group) or if said Radio network controller (RNC) not is impacted the measurement is forwarded to the Radio base station (RBS) and the RBS makes this decision.

19. (New) The method according to claim 12, wherein artificial delay are stored within said Radio base station (RBS) to accomplish that the two signals from said two antennas are received within the RAKE window so that softer handover can be made.

20. (New) The method according to claim 19, wherein a delay equalisation function makes the digital delay between the receiver/antenna and the RAKE receiver the same for all receivers/antennas.

21. (New) The method according to claim 12, wherein the delay is optimised to maximize the number of successful softer handovers.

22. (New) The method according to claim 21, wherein the delay are determined by evaluating the UE measured delay of a history of successful hand over between the related RRUs.

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